

07-02-04

*JSW*

Application No. (if known): 10/817,527

Attorney Docket No.: 01641/100M577-US1

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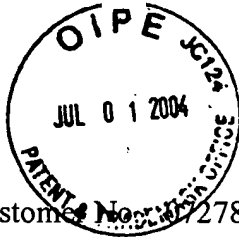
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Information Disclosure Statement (4 pages)  
PTO SB/08 (2 pages)  
15 Documents  
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Customer No. 278

Docket No.: 01641/100M577-US1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Daniel Krahmer, et al.

Serial No.: 10/817,527

Filed: April 1, 2004

For: OBJECTIVE WITH FLUORIDE CRYSTAL LENSES

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July 1, 2004

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Information Disclosure Statement is submitted in accordance with 37 C.F.R. 1.97, 1.98, and it is requested that the information set forth in this statement and in the listed documents be considered during the pendency of the above-identified application, and any other application relying on the filing date of the above-identified application or cross-referencing it as a related application.

1. This IDS should be considered, in accordance with 37 C.F.R. 1.97, as it is filed: (Check one of the boxes A-D)

- ☐ A. Within three months of the filing date of the above-identified national application or within three months of the entry into the national stage of the above-identified international application.
- ☒ B. before the mailing date of a first office action on the merits, or a first office action after filing a request for continued examination.
- ☐ C. after (A) and (B) above, but before the mailing date of a final rejection, a notice of allowance, or any other action that closes prosecution, and Applicants have made

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the necessary statement in box "i" below or paid the necessary fee in box "ii" below.

(check one of the boxes "i" and "ii" below:)

- ☐ i. Counsel states that, upon information and belief, each item of information listed herein was either (a) cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS; or (b) was not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of undersigned after making reasonable inquiry, was not known to any individual designated in 1.56(c) more than three months prior to the filing of this IDS.
- ☐ ii. A check for the fee set forth in 1. 17(p), presently believed to be \$180, is enclosed.
- ☐ D. after (A), (B) and (C) above, but before payment of the issue fee: Counsel states that, upon information and belief, each item of information listed herein was either (i) cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the IDS; or (ii) was not cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the undersigned after making reasonable inquiry, was not known to any individual designated in 1.56(c) more than three months prior to the filing of this IDS.
- ☐ i. A check for the fee set forth in 1.17 (p), presently believed to be \$180, is enclosed.

2. In accordance with 37 C.F.R. 1.98, this IDS includes a list (e.g., form PTO/SB/08) of all patents, publications, or other information submitted for consideration by the office, either incorporated into this IDS or as an attachment hereto. A copy of each document listed is attached, except as explained below.

(check boxes A, B and/or C and fill in blanks, if appropriate.).

- ☒ A. Pursuant to the Notice issued by the United States Patent and Trademark Office dated July 11, 2003 waiving the requirements of 37 C.F.R. § 1.98(a)(2)(i), a copy/copies of the United States Patent on PTO/SB08 is/are not being submitted.
- ☐ B. Document(s) \_\_\_\_\_ is (are) deemed substantially cumulative to document(s) \_\_\_\_\_, and, in accordance with 1.98(c), only a copy of each of the latter documents is enclosed.
- ☐ C. Certain documents were previously cited by or submitted to the Office in the following prior applications, which are relied upon under 35 U.S.C. 120:

[SERIAL NO. & FILING DATE].

Applicant identifies these documents by attaching hereto copies of the forms PTO-892 and PTO/SB08 from the files of the prior application(s) or a fresh PTO/SB/08 listing these documents, and request that they be considered and made of record in accordance with 1.98(d). Per 37 CFR 1.98(d), copies of these documents need not be filed in this application.

☒ 3. Documents BE, BF, BG and BH are not in the English language. In accordance with 1.98(c), Applicant states:

- ☒ An English abstract of each document (or of the pertinent portions thereof), or a copy of each corresponding English-language patent or application is enclosed.
- ☐ A concise explanation of the relevance of document(s) \_\_\_\_\_ is found in the attached search report (see MPEP § 609 A(3)x).
- ☐ A concise explanation of the relevance of document(s) \_\_\_\_\_ is set forth as follows: [Insert concise explanation of relevance]
- ☐ A concise explanation of the relevance of document(s) \_\_\_\_\_ can be found on page(s) \_\_\_\_\_ of the specification.
- ☐ A concise explanation of document(s) \_\_\_\_\_ can be found on the attached sheet.

☐ 4. No explanation of relevance is necessary for documents in the English language (see MPEP § 609 A(3)).

☐ 5. Other information being provided for the examiner's consideration follows: [A/An \_\_\_\_\_ Search Report, dated \_\_\_\_\_, which issued during the prosecution of \_\_\_\_\_ Application No. \_\_\_\_\_ which corresponds to the present application.]

6. In accordance with 37 C.F.R. 1.97(g) and (h), the filing of this IDS should not be construed as a representation that a search has been made or that information cited is, or is considered to be, material to patentability as defined in §1.56 (b), or that any cited document listed or attached is (or constitutes) prior art. Unless other-wise indicated, the date of publication indicated for an item is taken from the face of the item and Applicant reserves the right to prove that the date of publication is in fact different.

**CROSS REFERENCE UNDER 37 C.F.R. §1.78 TO RELATED APPLICATIONS**

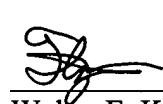
Pursuant to 37 C.F.R. § 1.78, Applicant notes that the above-identified patent application may be related to the following U.S. Patent Applications:

(1) U.S. Patent Application Serial No \_\_\_\_\_, filed \_\_\_\_\_.

Early and favorable consideration is earnestly solicited.

Respectfully submitted,

July 1, 2004

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PTO/SB/08a/b (08-03)

Approved for use through 07/31/2006. OMB 0651-0031  
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<b>Substitute for form 1449A/B/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)				<b>Complete If Known</b>	
				Application Number	10/817,527
				Filing Date	April 1, 2004
				First Named Inventor	Daniel Krahmer, et al.
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	1	of	2	Attorney Docket Number	01641/100M577-US1

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	AA**	US-2003/0011896-A1	01-16-2003	Shiraishi	
	AB**	US-2003/0011893-A1	01-16-2003	Shiraishi et al.	
	AC**	US-2003/0000453-A1	01-02-2003	Unno et al.	
	AD**	US-2003/0012724-A1	01-16-2003	Burnett et al.	
	AE**	US-2003/0021026-A1	01-30-2003	Allan et al.	
	AF**	US-2003/0053036-A1	03-20-2003	Fujishima et al.	
	AG**	US-2003/0058421-A1	03-27-2003	Omura et al.	
	AH**	US-6,201,634-B1	03-13-2001	Sakuma et al.	
	AI**	US-6,324,003-B1	11-27-2001	Martin	

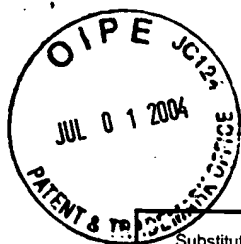
\*\* Pursuant to the Notice issued by the United States Patent and Trademark Office dated July 11, 2003 waiving the requirements of 37 C.F.R. § 1.98(a)(2)(i), a copy/copies of the United States Patent on PTO/SB08 is/are not being submitted.

FOREIGN PATENT DOCUMENTS						
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		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	BA	WO-01/01182-A1	01-04-2001	Corning Incorporated		
	BB	WO-01/50171-A1	07-12-2001	Carl Zeiss		
	BC	WO-02/093209-A2	11-21-2002	Carl Zeiss Semiconductor Manufacturing Technologies AG		
	BD	WO-02/099500-A2	12-12-2002	Optical Research Associates		
	BE	WO-03/009017-A1	01-30-2003	Nikon Corporation		
	BF	WO-03/023481-A1	03-20-2003	Nikon Corporation		
	BG	JP-11-106296-A1	04-20-1999	Mitsui Chem Inc.		
	BH	DE-40 22 904-A1	01-23-1992	Siemens AG		

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \*\*CITE NO.: Those patent(s) or publication(s) which are marked with an double asterisk (\*\*) next to the Cite No. are not supplied because they were previously cited by or submitted to the Office in a prior application relied upon in this application for an earlier filing date under 35 U.S.C. 120. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	CA	Burnett, J.H., et al., "Intrinsic birefringence in calcium fluoride and barium fluoride", Physical Review B, Vol. 64, No. 24, December 15, 2001, pp. 241102-1 - 241102-4, XP-002218846.	
	CB	Pastmak, J, et al., "Optical anisotropy of Silicon Single Crystals", Physical Review B (Solid State), April 15, 1971, Vol. 3, No. 8, pp. 2567-2571, XP-001109107.	
	CC	Van Peski, Chris; Memo to PAG Members, "Re: Birefringence of calcium fluoride", May 7, 2001, XP-002218847.	
	CD	Van Peski, Chris; Memo to Exposure Tool Manufacturers and Lens Designers, "Re: Birefringence of Calcium Fluoride", May 7, 2001, XP-002218848.	

Examiner Signature		Date Considered	
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				Filing Date	April 1, 2004
				First Named Inventor	Daniel Krahmer, et al.
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
				Attorney Docket Number	01641/100M577-US1
Sheet	2	of	2		

	CE	Burnett, J.H., et al., "Intrinsic Birefringence in 157nm Materials" at 2nd International Symposium on 157nm Lithography in Dana Point, California, May 15, 2001, XP-002218849.	
	CF	Burnett, J.H., et al., "Symmetry of spatial-dispersion-induced birefringence and its implications for CaF2 ultraviolet optics", J. Microlith., Microfab., Micosyste., Vol. 1, no. 3, October 3, 2002, pp. 213-224.	
	CG	Relation between US20030011893 A1, US20030011896 A1 and WO 02093209.	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

Examiner Signature		Date Considered	
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